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AN  
INAUGURAL ESSAY,  
ON THE  
PUERPERAL STATE OF FEVER.

SUBMITTED TO  
*THE EXAMINATION*  
OF THE  
REV. JOHN ANDREWS, D. D. PROVOST, (Pro Tem.)  
THE  
TRUSTEES AND MEDICAL PROFESSORS  
OF THE  
*UNIVERSITY OF PENNSYLVANIA,*

On the 5th day of June, 1805.

FOR THE DEGREE  
OF  
DOCTOR OF MEDICINE,

---

BY GEORGE E. MITCHELL, L. M.  
OF *ELKTON, MARYLAND.*

HONORARY MEMBER OF THE PHILADELPHIA MEDICAL SOCIETY.

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"Errors in theory, seldom fail of producing errors in practice."  
RUSH.

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PHILADELPHIA:  
PRINTED FOR THE AUTHOR, BY JOHN H. OSWALD.

.....  
1805.

Dr John McFarlan, with  
the respect & esteem of his  
friend & fellow student  
The Author

TO

DOCTOR ABRAHAM MITCHELL,  
OF ELKTON, MARYLAND.

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DEAR SIR,

WHETHER I contemplate your virtues as a citizen, or your talents as a Physician, I find you equally worthy of the highest esteem and respect.

My gratitude is eminently due to you for your kind and generous patronage, and particularly for the many opportunities you have given me of becoming informed in my profession, and for the medical knowledge I have derived from your private communications, which I am conscious, being dictated by your superior judgment, will be of the highest importance in the practice of my profession.

That you may continue to enjoy health and prosperity, is the cordial wish of

Your affectionate Son and Pupil,

THE AUTHOR.

TO  
DOCTOR BENJAMIN RUSH,  
*PROFESSOR OF THE INSTITUTES,*  
AND  
PRACTICE OF MEDICINE,  
IN THE  
UNIVERSITY OF PENNSYLVANIA.

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HONORED SIR,

TO YOU, illustrious as a Philosopher, a patriot, and a citizen, this imperfect essay is inscribed as a small, but sincere tribute of respect due to your superior merit, and, in gratitude for the principles of my profession, imbibed from your valuable lectures, and for the attention and politeness with which you have honored me, in sickness and in health.

That bounteous heaven may continue to bless you with prosperity, will ever be the wish of

Your sincere Friend, and

Obliged Fellow Citizen,

GEO. E. MITCHELL.



TO  
DOCTOR JAMES HUTCHINSON,  
*OF PHILADELPHIA.*  
LATE HOUSE SURGEON,  
OF  
THE PENNSYLVANIA HOSPITAL.

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**T**HIS ESSAY is also inscribed, as a tribute of respect, for your talents, and as a mark of gratitude for the attention and politeness which you honored me with, during my attendance as a student at the Pennsylvania Hospital....That your health may be restored, and fortune be ever propitious, is the sincere wish of

Your Friend,

THE AUTHOR.

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## PREFACE.

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*" In every work, regard the writer's end,  
" Since none can compass more than they intend."*

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THE following essay is published in compliance with the laws of the University of Pennsylvania, demanding an Inaugural Essay on some medical subject, previously to my receiving the highest honors of my profession.

The author is as sensible as the learned critic will be, that it abounds with imperfections.....to his friends he hopes the short time allotted for writing it.....and being compelled to write by the stimulus of necessity, will be sufficient apologies for its incorrectness.

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AN ESSAY  
ON  
PUERPERAL FEVER.

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THERE are no forms of disease, which demand the sympathy and attention of physicians more, than those peculiar to the fair sex. Their conformation subjects them more to disease ; and although in the most early periods, as well as in this enlightened æra, many successful exertions have been made to alleviate their distresses, yet much remains to be done ; and when we consider that their diseases constitute so considerable, and important a part of the practice of medicine ; that physician is culpable, who neglects to become acquainted with those forms of disease, to which their peculiarity of structure and conformation expose them.

The subject of this Essay, is that disease which attacks women in their puerperal state ; hence it has obtained the name of Puerperal Fever. It has been described by very ancient writers, under different names ; some supposing it to be an inflammation of the uterus, others a suppression of the lochia ; while others, still more extravagant, described it as being an impeded secretion and metastasis of the milk. And although we have many lamentable proofs of its fatality and devastation, recorded ; yet what is still more lamentable, it was seldom or never treated with success. On the authority of the ingenious Doctor Gordon, we find this disease very fatal in Paris, as late as the years 1746 and 1750, and that no one who was attacked with it, recovered.

Doctor Hunter says, that in the Lying-in Hospital, of London, in the space of two months, thirty two patients were affected with this disease, and only one, of that large number, recovered. And in another Hospital, nineteen were seized with it, during the epidemic season, of whom thirteen died.

The yearly bills of mortality, for the cities of London, and Westminster, (on the authority of Dr. Leake) are melancholy testimonies of the inefficacy of our science, in this disease. From December 13th, 1768, to December 12th, 1769, died of this fever, one hundred and eighty five. From December 12, 1769, to December 11th, 1770, died two hundred and seventy; and from December 11th, 1770, to December 10th, 1771, died one hundred and seventy-two.

Doctor Gordon says, that one of the Professors of midwifery, in the University of Edinburgh, declared the puerperal fever incurable ; and another Professor, of the same University, concludes his observations on it, in the following words. “ From “ the above cases, and from all that has been yet written upon “ this subject, we may, with great truth, conclude, that we “ know little of the nature and still less of the cure, of puer- “ peral fever.” And in the practice of Doctor Gordon, who was most successful in this disease, twenty-eight died, out of seventy-seven.

I have perused no author on this subject, who does not consider it as a dreadful and fatal disease. That a disease, so remarkable for its fatal termination, should excite the attention of the faculty, is not to be wondered at ; and consequently, in every age, we find some guardian of our science, endeavouring to impede its progress ; a noble attempt, to meliorate the distressed condition of humanity, and alleviate the pains inseparable from existence ! The intimate connection between the body, and the mind, and their reciprocal dependence on each other, prove health to be essential to the happiness of man.

Erroneous and imaginary theories have been taught, and received as orthodox, which have too long retarded the progress of our science, and superceded a theory formed on rational inductions from established facts. "Errors in theory, seldom fail of producing errors in practice." The great necessity of a theory formed on the solid basis of established facts, which would guide to a successful practice, has been acknowledged by some, as the greatest desideratum of our science. Yet, how much has been said against theory in medicine? Is it not to a knowledge of the theory or principles of navigation, that we are indebted for the many advantages we now enjoy, by our commercial intercourse with different parts of the globe? Great and important advantages arise from just principles in medicine. An American theory, which teaches unity and simplicity of disease, will lead to a successful practice.

Puerperal fever has been the subject of great diversity of opinion. The erroneous theory of the putrefaction of the blood, as taught by the great Boerhaave, induced many to consider it a putrid disease: this is the offspring of ignorance; for putrefaction of the blood is incompatible with life. Others have considered it a highly inflammatory disease; this is more rational, and I admit, is frequently the case. I feel happy in having my knowledge of this disease deduced from a theory, which experience has taught, leads to a successful treatment. It is that theory which is taught by the Professor of the institutes and of the practice of medicine, in the University of Pennsylvania, which teaches disease to be an unit, consisting in a morbid, irregular, and convulsive action, in the sanguiferous system, whether consisting in an excess or defect of action. It breaks the fetters of nosological arrangement, and banishes the absurdity of prescribing for the name of a disease. It confines the attention to the pulse, the Chronometer of life; the degree of morbid action in the system; the sensible

qualities of the atmosphere ; a knowledge of the structure of the human body, and the laws of animal life.

The ingenious, but unfortunate, Dr. John Brown, and the illustrious Professor Rush, declare animal life to be a forced state, the effect of stimuli acting on a peculiar organization of matter, which enables it to emit life. This susceptibility of matter, to take on life, is properly called excitability, and the effect of stimuli acting on it, is called excitement, which is life.

In health, when all the functions of the body and mind are performed with regularity, there is a just ratio, between the action of stimuli, excitability and excitement. An increase or diminution of stimuli will produce debility, which, when induced by excess of stimuli, is called indirect or debility from action ; when from an abstraction of stimuli, direct or debility from abstraction ; both of these are succeeded by increased excitability ; this is not equally diffused through the system ; but abounds in parts most debilitated ; hence the concentration of irregular morbid excitement, that follows the application of disproportionate stimuli.

Puerperal fever generally makes its attack on the evening of the second, or commencement of the third day, to the sixth after parturition ; a time when the solicitous mother anticipates alleviation from trouble and pain, which she has borne with so much anxious fortitude ; but alas ! her liberation is often the exciting cause of a much dreaded disease.— It generally commences suddenly, with violent rigours, which are succeeded by a violent reaction of the heart, and arteries, remissions, and exacerbations often alternating. The pulse indicates much disease, and is generally, at the commencement, Synocha, Synochula, or Typhoid.

The abdomen is affected with continued and excruciating pain, it is extremely sore on pressure, which characterises it from after pains. It often suffers tumefaction.

Excessive pain in the back, and lower extremities, and swollen legs are often concomitants.

Great nausea, and bilious vomiting, often attend, and sometimes the alimentary canal is affected with profuse diarrhæa, and not unfrequently tenesmus, and obstinate costiveness.

In the onset of the disease, the tongue is furred and white, but at the close, it often assumes a dark brown color, is rough and dry, accompanied with excessive and distressing thirst.

The face is often flushed, and as the disease progresses, the countenance becomes sorrowful, with great dejection of mind.

*“ The cheerful, pure and animating bloom,*

*“ Dies from the face ; with squalid atrophy*

*“ Devoured, in sallow melancholy clad.”*

The skin is hot and dry, partial sweats often occur, and when cold, and confined to the face, and breast, are harbingers of imminent danger.

A great and sudden prostration of strength, accompanied with inability to turn in bed, frequently attends through the whole course of this disease.

Respiration is laborious and hurried, attended with cough, and great pain.



The head sympathises ; on the commencement, the pain is generally confined to the anterior part of the cranium, and when the system is almost sunk under accumulated evils, the faculties and operations of the mind become deranged.

The lochia, or customary discharge from the uterus after parturition, is seldom suppressed, and in proportion to the advancement of the disease, this uterine discharge often becomes vitiated.

The secretion of milk is seldom suppressed,.....often lessened, and much altered in taste and color.

The urine is often evacuated with great difficulty, which is small in quantity, and of a high color.

The blood drawn indicates high morbid excitement. Hulme and Leak always found the blood sizzly. Doctor Gordon says, that blood drawn in this disease resembled that of patients in pleurisy and rheumatism, having a very thick inflammatory crust. I have seen blood drawn in this disease exhibit the above appearance, and in one case it was dissolved.

The appetite forsakes the patient at the first attack. Sleep is confused, broken and interrupted with startings and dreadful dreams. In sleep the mouth often remains open, and the eyes half closed.

The sweats now become cold, viscid and clammy ; rigours return, the tongue and teeth are covered with a dark slimy sordes ; petechiæ, irruptions, singultus, facies hippocratica, insensibility, derangement of mind, involuntary discharge of fæces, and urine, cold extremities, loss of sight, and convulsions close the melancholy scene, and death brings re-



hief to the poor afflicted patient, who has suffered indescribable torture.

Thus the most prominent symptoms, which accompany this disease, have been enumerated; many of them I have witnessed; they will vary according to the constitution of the patient, the grade and period of the disease.

If the distressed patient withstands the dreadful conflict, it is generally owing to the interposition of some profuse critical discharges; profuse vomiting, and diarrhæa, perspiration, hemorrhagias, translation of morbid excitement to the extremities, or other parts, in form of erysipelas or abscess, have all produced favorable terminations.

This disease is of short duration, when unassisted by art. It sometimes terminates in twenty-four or thirty-six hours. Gordon says more than one half die on the fifth day; this day, "therefore," says he "may be deemed the principal of the fatal critical days, and it is likewise the principal critical day when the crisis is salutary." But death often terminates the scene, at a more distant period from the attack; and, when it terminates in her favor, her recovery will be very tedious, requiring great attention to remove the supervening debility.

Many of the customs and modes of living, which result from civilization, dispose our females to many diseases from which those in a state of nature are exempt; those are peculiarly liable to this disease, who are of a very delicate conformation, whose minds have been saddened by the depressing passions and emotions, and who have been subject to maltreatment during pregnancy and parturition.

The predisposing cause of this disease is debility: which, whether from an excess or defect of stimulus, is indispensably

necessary to produce disease. We often find it existing in an eminent degree, after parturition, but more abundantly in the contents of the abdomen and pelvis ; therefore, when morbid or irregular excitement is produced by an exciting cause, they must suffer a concentration of it.

Exciting causes of this disease, are such as, acting on the body when predisposed to disease, produce morbid or irregular excitement in the system.

In this disease, as in many others, the effect has been considered as the cause ; hence we find, that a suppression of, or vitiated lochia, impeded secretion or metastasis of the milk, inflammation of the uterus, and of the peritoneum and its reflections, have all been considered as causes of this disease.

Doctor Leak says, that the lochial discharge often continues through the whole course of this fever, often of a natural smell and appearance, and frequently fetid, without producing disease.

I have attended several patients in this disease ; in two, the lochia, continued through the whole progress ; and in two others it was not suppressed 'till an advanced stage of the fever. Hulme paid no regard to obstructed lochia ; he considered it the effect, not the cause of this disease.

This disease is frequently produced before there is a sufficient time for the secretion of milk, or any morbid change in that fluid. Many have a plentiful secretion of milk, which continues till the fever is considerably advanced, and a suppression of it seldom produces disease.

The inflammation of the uterus, omentum, and peritoneum, which has been considered as the cause of this disease, produced by a sympathy of the constitution with these parts, may, with great propriety, be considered as the effect of an idiopathic, increased and irregular excitement in the sanguiferous system, invited to those parts by accumulated excitability.

The causes of this disease may be referred to two general classes.

1st. Those which occur previously to parturition.

2d. Those occurring after parturition.

1st. Many of the causes existing previously to parturition, are, principally from the gravid uterus, and are to be removed only by delivery.....They may be alleviated by proper remedies.....They are collections of indurated fæces, nausea, vomiting, diarrhæa, suppression of urine, and stranguary, all of which should be particularly regarded, as they predispose much to the formation and violence of this formidable complaint.—Improper diet,.....improper exhibition of stimulating and cordial potations,.....apparel too light and not accommodated to the vicissitudes of the climate,.....want of cleanliness,.....a damp unhealthy atmosphere,...alternation of heat and cold,...violent and harsh treatment of the accoucheur during parturition,....injury sustained by very laborious and preternatural labors,....violence offered in extracting the placenta,....may be considered as causes of this malignant and fatal disease.

2d. Causes which produce this disease, after parturition,—are, excessive heat from the pressure of bed-clothes, and confined air ; hence more common among the poor, and, in confined hospitals.

Epidemic constitution of the atmosphere. This fact was known even to Hippocrates, and Sydenham; and every observant American physician, must have noticed the influence of the constitution of the atmosphere, which produces our malignant fever, in puerperal women.

Errors in diet, as well as free indulgence of spirituous liquors, are, too frequently, exciting causes of this disease.

Tight bandages, or ligatures to the abdomen; injuries done to the uterus, by pressure, or difficult parturition; or, according to Dr. William Hunter, too easy parturition, whereby there is no reaction, to remove the disease of the uterus from gestation, by the depletion of the lochia. This reaction is unnecessary, where venesection and low diet had preceded.

Many other causes excite this disease, which is violent and rapid, in proportion to the predisposing debility, and the force of the exciting causes.



### *Appearances on Dissection.*



Great information of the seat, and violence of disease, may be discovered, from an accurate investigation of the human body, after decease; and it may be justly said, that a negligence, in this particular, has much retarded the progress of medical science.

Dissections of puerperal dead, have led to a pretty accurate knowledge of this disease, and to a successful mode of treatment.

The contents of the abdomen exhibit congestion, inflammation, suppuration, and mortification; the certain effects of great excess of morbid excitement. The abdomen often contains pus, and serous fluid, and emits, when opened, a very fætid gas. The peritoneum, and its productions, the omentum, mesentery, and mesocolon, are always, much diseased.

The thorax generally exhibits marks of high inflammation.

A dissection recorded by Doctor Gordon, of a patient who died on the fifth day, will give a just idea of the violence of this disease.

“ I found the peritoneum and its productions ; the omentum, mesentery, and mesocolon, in a state of inflammation. The omentum had lost about half its substance, by suppuration ; the mesentery and mesocolon, and that part of the intestinal canal, with which they are connected, were very much inflamed. But the disease appeared more especially to occupy the right side ; the right ovarium had come to a suppuration ; the colon, from its caput, along the course of the ascending arch, was much inflamed, and beginning to run into gangrene. A large quantity of pus, and extravasated serum appeared in the cavity of the abdomen, which, when taken out and measured, amounted to two English pints. The peritoneal coat of the uterus, was inflamed, and the organ itself not so compact and contracted, as it ought to have been. Upon opening it, its cavity was found covered with a black coloured substance, which at first sight, had the appearance of mortification, but when wiped off, was found to be nothing else than membrana decidua, in the state in which it naturally is, about this time.” The vio-

lence and rapidity of this case, as related by this ingenious author, is a convincing proof, that it is often of a highly inflammatory nature.

It is observed by the ingenious physiologist, Mr. Hunter, in his treatise on inflammation, "that when the attack upon these organs, which are principally connected with life, proves fatal, the effects of inflammation upon the constitution, run through all the stages, with more rapidity, than when it happens in other parts ; so that at its very beginning, it has the same effect upon the constitution, which is only produced by the second stage of inflammation, in other parts." This being a fact, and in this disease, a concentration of morbid action falling on parts so essential to life, accounts at once for its violence, fatal and rapid termination ; which must be much accelerated by the previous situation of the sufferer.

As was before observed, many opinions are extant, with respect to this disease.

That which supports its putrid nature, is incompatible with life ; as has been proved by the ingenious Doctor Seybert of Philadelphia, in his experiments on the blood. "And the symptoms which have been supposed to designate a putrid fever, are wholly the effect of mechanical action in the blood vessels, and unconnected with the introduction of a putrid ferment in the blood." That state of fever, which has been denominated putrid, has been happily called by the illustrious Professor of the institutes of medicine, the gangrenous state of fever. "For what appears to some physicians, to be signs of putrefaction, are nothing but the issue of a violent inflammation, left in the hands of nature, or accelerated by stimulating medicines. Thus the sun, when viewed at mid-day, appears to the naked eye, from the ex-



“ cess of its splendor, to be a mass of darkness, instead of an orb of light.”

Another opinion of this disease being highly inflammatory, I admitted to be rational and just ; for the pulse is often synocha, synochus and synochula. The symptoms, the appearance of blood drawn, and successful remedies, prove it often very inflammatory, or a disease of great morbid excitement. But it often commences with the typhus form, and the inflammatory action quickly passes to the typhus state ; which is known by a frequent and quick pulse, a great disposition to sleep, a torpor of the alimentary canal, tremors, partial and clammy sweats, petechiæ, singultus, and often a profuse diarrhæa.

Having finished the history, symptoms, and causes of this disease, with the appearance on dissection, I now proceed to the curative indication, which must be divided into

### *Remedies for the inflammatory,...and Remedies for the typhus state of this disease.*

1st. Remedies for the inflammatory puerperal fever. These are, such medicines as lessen, by the abstraction of stimulus, the morbid and excessive action of the blood-vessels ; and remedies which direct local congestion and serous effusions from vital parts, to such as are less essential to life : viz. 1st. Blood-letting. 2d. Cathartics. 3d. Emetics. 4th. Blisters. 5th. Sialogogues.

When diversity of opinion exists, relative to the nature of a disease, the same diversity will exist in the *modus medendi*.

1st. Blood-letting, in this disease, has been violently opposed by many authors, and practitioners in medicine. Others have strongly advocated the propriety of using it. Leak and

Gordon have said much in its behalf. The great propriety of using it, is indicated by the pulse, the appearance of the blood, and the success which attends its proper use. The long and successful practice of Dr. Rush, and a number of eminent physicians, in this disease, establishes its efficacy, beyond a doubt. Its indispensable necessity is pointed out by the violence and rapidity of the disease, which demands the most prompt and powerful remedies, to save the sinking, suffering, and frequently, lovely patient. Dr. Gordon seldom failed in effecting a cure, when he was permitted to follow his inclinations in the treatment of this disease. Blood-letting is the anchor of hope, in this, and many of the most fatal complaints, which afflict mankind ; and when we hear and read of its want of success, in the hands of many physicians, we must attribute it to an injudicious use, as to time, and quantity.

Botallus says, bleeding is more beneficial than all other remedies, provided it be seasonably employed, and in due quantity : but I am of opinion, says he, it sometimes does no service, either because practitioners are too late in having recourse to it, or use it too sparingly, or commit some error in both these particulars. For, if a disease, which requires four pounds of blood to be taken away, in order to cure it, and only one is taken away, destroys the patient, it does not prove destructive because bleeding was used, but because it was performed in an improper, and perhaps, in an unseasonable manner. Dr. Gordon says he found Botallus' observation applicable in the puerperal fever. Who can restrict the time and quantity of blood to be effused in a raging or malignant fever ? " Proper remedies in their proper places, constitute the perfection of medicine." The state of the system must be the lancet's chronometer. This remedy supercedes all others, when justly proportioned to disease. It renders, the exhibition of other remedies more effectual : and knowing this fever to be an irregular and convulsive action of the arterial system, the effects



of proper bleeding, will be as effectual in curing, as the removal of mechanical bodies would be to lessen irritation, which depended on them.

To fully contrast the practice of those physicians who are opposed to blood-letting, and make improper use of it, with the practice of those who employ it properly, would effectually convince the sceptic, of its transcendant efficacy : but the limits allotted to this essay, will not permit: let it suffice to say that success almost always attends its proper application ; want of it is generally the effect of the neglect of its ~~///~~proper employment.

Several cases of this disease occurring, whilst I was engaged in writing this essay, I will relate one, in which this remedy, I am convinced, saved the life of the patient.

This patient, Mrs. V. was attacked, several days after a tedious parturition, with violent rigours, succeeded by excessive, irregular, and convulsive action of the arterial system : her head, back and abdomen were affected with excruciating pain ; her face was much flushed ; she was extremely restless ; her mind much agitated ; her pulse, synocha. In this situation, I found her, on the night of the 13th of April. I bled her to  $\frac{3}{4}$  xxv. Her pains were much alleviated ; her pulse was not so much reduced as I had expected, from this evacuation : she expressed herself much relieved. A cathartic of ol. Ricini was ordered, which operated well, during the night. On the 14th I visited her early in the morning : she had passed a very restless night : the state of her system was nearly the same as I found it the preceding night. I bled her this morning, to  $\frac{3}{4}$  xxv. which had the desired effect. Her pains immediately left her ; her countenance was more natural ; and she said she was much relieved ; her pulse was much reduced. I ordered other depleting remedies.

In the evening of the same day, I visited her, at 6 o'clock ; her pulse was synochula ; slight pain in her abdomen :  $\frac{3}{4}$  vi. of blood were taken this evening, with manifest advantage. I now considered her free from the imminent danger I had found her in, and that the diseased action, remaining in her system, might now be trusted to milder remedies. On the 18th, her pulse was typhoid ; epispastics were applied to her arms, which were effectual in translating the morbid excitement. The next morning I found her free from fever, and thought it unnecessary to continue my attendance. In this patient, the lochia was discharged in its usual quantity, during her illness ; the milk appeared at its usual time, and continued.

This case, with many others which have come under my immediate attention, have convinced me that the theory and practice I have recommended in this disease, are correct.

The many cases of this fever which occur at the Philadelphia Dispensary, I am informed by my ingenious friend and fellow student, Mr. Samuel B. Smith, of that institution, terminate favorably, the consequence of similar practice.

Another case extracted from my note book, I think well worth relating ; as further demonstrating the great success of this remedy, when indicated. October 20th, 1804, Mrs. S. a woman of delicate constitution, was seized thirty-six hours after delivery, with a violent chill, which continued several hours ; and was then succeeded by a very violent fever. I was called to see her the next day ; her pulse was quick and very tense, in frequency about 100 in a minute ; her abdomen much tumefied, and excessively painful, excruciating pains in her loins and extremities. I bled her to  $\frac{3}{4}$  xvi. which much relieved her ; other evacuating remedies were prescribed. I visited her again on the 22d, and found it necessary to repeat the bleeding, she was much relieved by it, and continued better

during the day. A return of her complaint with encreased violence, made it necessary for me to visit her in the night. I then had recourse to the lancet with very great advantage to her ; I ordered a continuation of other depleting remedies.

On the next day at three o'clock, P. M. it was necessary to repeat the bleeding, which was so effectual in subduing her disease, that my further attendance was unnecessary. Having not mentioned the quantity of blood drawn at each bleeding, I will just observe, that I was governed entirely by the pulse and state of the system : and I am fully convinced that those authors and practitioners, who are opposed to this safe and effectual remedy, have done and will do much injury by neglecting its proper use.

Blood letting in this disease must be assisted by other indicated remedies ; good attention from the attendants is of the greatest importance, without which, the most effectual remedies prescribed by the most eminent Physician will be of little importance. A case which terminated in death, which the ingenious Doctor I. Stuart of Philadelphia, favored me with, will evince the helpful tendency of this remedy, the violence of the disease, and the indispensable necessity of proper attention to the patient, and to the directions of the Physician.

On the 23d of July, 1804, I was called to visit Mrs. P.....r ; she was apparently of a sound constitution, and about 24 years of age. She had been delivered by a midwife, of a healthy child, on the 21st of the same month. On the night of the 22d, she was attacked with a chill, which was succeeded by fever, a pain in the head, back and abdomen, and considerable thirst. Her countenance was flushed, the eye watery, and the sclerotica a little suffused with blood. The respiration

was rather short and oppressed. The pulse was full and strong. The tongue white and moist, and the intestines bound. The lochia continued in a usual quantity. She was ordered to lose sixteen ounces of blood, and to take a gentle cathartic. On the 24th, the medicine had operated several times, the pain of the head was much relieved, but the pulse continued active. The lochia were stopped. She was directed to lose eight ounces more of blood, and to take some nitrous powders. On the morning of the 25th, she had had a refreshing night's rest, was nearly free from all pain and fever. She was ordered to continue the nitrous powders. On the afternoon of the 26th, I was sent for to visit her, in consequence of a recurrence of the former symptoms, which were now attended with a distressing vomiting, and anxiety about the precordia. These symptoms had taken place about nine o'clock in the morning of the same day. She justly imputed them to her having eaten plentifully of dried beef, and drinking some anniseed cordial on the evening of the 25th, saying she had soon after been seized with a burning sensation in the stomach. Her stomach was so irritable, as to eject every thing that was taken into it. Her countenance was flushed and fierce. The pulse was corded and active, she was affected with anxiety and sighing, pain in her head and back, with great prostration of strength. She was directed to lose twelve ounces of blood, to have a blister applied to the region of the stomach, and to take four grains of calomel every three hours. At ten o'clock she had an alvine discharge, which was very offensive, and dark colored. The vomiting had ceased about two hours before. She sighed much, and her restlessness and anxiety were still distressing. The skin was cooler; the pulse less active, but still corded and hard. Blisters were now ordered to the extremities, and the calomel repeated. On the 27th, in the morning, the blisters on the extremities had not taken effect. The countenance was cadaverous, and the eyes glassy. The extremities were cold, and bedewed with a clammy sweat.

The pulse was tremulous, and at intervals, scarcely perceptible. She was affected with a low delirium, with a desire to get out of bed; harrassed with a distressing hiccup, and constant inclination to vomit, without discharging any thing except mucus, and the liquids she had taken in. The blisters were removed, and in their places fresh ones with a quantity of the oxymuriatæ hydrargyrus in each, put on. The calomel was continued, in doses of eight grains each. This was ordered to be accompanied with large and often repeated mercurial frictions, joined to sinapisms and jugs of hot water to the feet. About twelve o'clock she vomited up a considerable quantity of black matter, and at about 5 P. M. expired under that discharge.

If from an error of the nurse, in exhibiting her misplaced food and cordial, the exertions of a successful and eminent physician, were rendered ineffectual, how easy is it to account for the bad success of those physicians, who, influenced by erroneous theories, or none at all exhibit without regard to the state of the system, opium, bark, wine, their stimulating draughts, boluses, &c. !

Blood letting is more effectual than all other remedies, when the quantity, and time necessary for using it, are regulated by existing circumstances. But when improperly employed, is very injurious, and often fatal.

“ For the best medicines improperly prescribed, are the greatest poisons, and the greatest poisons, properly prescribed, are the best medicines.”

## 2d. *Cathartics,*

Are the next remedy which demand our attention in this disease. They “are useful in discharging acrid fæces, and bile, from the bowels, in fevers. They act, moreover, by “creating an artificial weak part, and thus invite morbid ac-



“ tion from the blood vessels to the bowels. They likewise  
 “ lessen the quantity of blood, by preventing fresh accession  
 “ of chyle being added to it.”

This disease terminating often favorably, through the intervention of a profuse diarrhæa, early induced physicians to place much confidence in them. They are of much advantage in this disease, when prescribed properly, and much advantage is to be expected from them, when used as assistants with other remedies.

### 3d. *Emetics.*

“ They discharge offensive and stimulating matters from  
 “ the stomach ; they lessen the fullness of the blood ves-  
 “ sels, by determining the serum of the blood through the  
 “ pores ; and they equalize the excitement of the system, by  
 “ inviting its excessive degrees from the blood vessels to the  
 “ stomach and muscles.”

They have been used by many physicians as auxiliaries to other remedies in the cure of this disease ; and some have trusted the cure to emetics alone. As this disease often takes on the typhoid form, emetics will in this state be of peculiar service, and have been considered by Professor Rush, as very effectual in untying the typhoid knot.

Mr. Doulcet, doctor regent of the faculty of medicine at Paris, and one of the physicians of the Hotel Dieu, depended entirely on emetics of ipecacuanha in this disease ; he exhibited one immediately after the attack, and repeated them often ; he was generally successful. As assistants in the cure of this disease, I consider them very valuable remedies.

I am unable to attribute any specific virtues to ipecacuanha in the cure of this disease ; but consider other emetics equally as efficacious, when used in their proper place ;

and they who trust to them alone, will often find them an ineffectual remedy, and always improper in fevers of great inflammatory action. They may be often exhibited with great advantage in small and repeated nauseating doses, when, generally acting as diaphoretics, they abstract a portion of the fluid parts of the blood, and reduce the morbid action of the blood vessels.

#### 4th. *Blisters.*

The great advantage and efficacy of blisters in many diseases, has rendered them a most important acquisition to the materia medica ; and when their time of application is regulated by the state of the system, we have a very valuable remedy in this disease. This state of the system has been judiciously called the blistering point. Their application is always improper, unless they are able to counteract the morbid action of the system. They are always proper in weak morbid action. They have generally been applied to the abdomen, but their effect will be equally efficacious, if applied to the extremities ; and the patients' sufferings will not be so great. They translate morbid action, and convert a centripetal into a centrifugal disease. Their application should be repeated often, according to circumstances.

#### 5th. *Sialagogues.*

Under this class I will confine my observations to mercury, which may justly be considered as a most valuable remedy in the treatment of fever. Experience has established its efficacy in curing the most powerful forms of disease in the catalogue of human calamities, and I may say with propriety, that there is no medicine in the materia medica more deserving of the panegyrics which have been bestowed on it.

Its success in this, and every form of disease, depends on a proper exhibition as to time and quantity ; when given as a

sialagogue in cases of high morbid action, its effects are injurious, unless the system is reduced to the salivating point by the most effectual depleting remedies. It acts by inducing a counteraction in the system, and “by exciting and inflaming the glands of the mouth and throat : excitement and inflammation are abstracted from more vital parts.” In many instances experience has proved this medicine very effectual in curing this disease, and when milder remedies fail, it ought always be resorted to by Physicians.



## REMEDIES

FOR THE

## TYPHUS PUERPERAL FEVER.



When this disease commences with, or assumes the typhus form, which is known by the before mentioned symptoms ; the indication of cure is to make use of such remedies, as by “exciting action in the stomach, bowels, brain, nerves, muscles and skin, equalize the excitement of the whole system, and thereby indirectly destroy a weak, but morbid action in the blood vessels, by imparting to them more vigorous and healthy action.

These remedies are called stimulants, and divide themselves into those which are used internally, and those which are applied externally. Those which are used internally are opium, fermented and distilled liquors, camphor, æther, Peruvian bark, colombo, rad. serpentar : mercury and many other valuable remedies under this class, which may be alternated with advantage. Much caution and attention is necessary in the exhibition of stimuli in this form of disease ; they should



be accommodated to the excitability of the system ; it is proper (unless the excitability is exhausted) to begin with the mildest stimuli, and accommodate their exhibition to existing circumstances. Stimuli are always improper unless they render the pulse slower and fuller.

Opium will be found very effectual in the typhus state of this fever, much attention is necessary to the pulse, and repetition of this medicine which ought always to be repeated before the exhaustion of the previous dose.

Wine and porter will be found of great importance ; and should be given in large quantities, as the state of the system will permit ; very large quantities of wine may be given in this form of fever without producing intoxication. The Peruvian bark, colombo root, Virginia snake root, and their many valuable substitutes may be used in rotation. Much advantage is to be expected from pure air, and nourishing diet. Mercury being a gradual and diffusible stimulant, may be often used in this disease with great advantage : it ought not to be given to produce a salivation, but just to excite and preserve an irritation of the mouth.

External stimuli, are, blisters, cataplasms, warm and hot bath, all which in the hands of physicians acquainted with the principles of their science, may be used with advantage.

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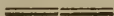
### *Prophylaxis.*

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It is the duty of every physician to endeavour to prevent as well as to cure, this disease, which, notwithstanding the indefatigable exertions of the most eminent physicians, will often terminate fatally.

It should be guarded against by avoiding all the predisposing and exciting causes.

It may often be prevented by good nursing, cleanliness, lenient cathartics, and blood letting, according to circumstances. A costive habit of body, stimulating potations and diet, all sudden affections of the mind are particularly to be cautioned against. Bandages applied to the abdomen too tight, confined air, too much heat or cold, must be avoided with care. Too much attention cannot be paid to the prophylaxis of this disease, for by necessary attention previously to, and after parturition, one of the most fatal diseases which the female sex are subject to, may be avoided.



I now with regret, bid adieu to you, enlightened and illustrious Professors. I should be extremely ungrateful and unworthy the numerous benefits I have received, if ever my respect and esteem for your superior talents and virtues should be diminished. Accept, Gentlemen, my sincere thanks, and that you may all enjoy happiness and prosperity, will ever be my wish.

To Dr. Philip S. Physick, lecturer on Surgery, in the Pennsylvania Hospital, and to Drs. James, and Church, lecturers on the theory and practice of Midwifery, I must acknowledge myself greatly indebted for information, which their unparalleled knowledge of their professions enable them to disseminate with so much advantage to the student.

It is also gratifying to my feelings, thus publicly to thank my friend and fellow graduate, Mr. Joseph Hartshorn, house-surgeon to the Pennsylvania Hospital, for his obliging attention to me, during my attending that valuable institution.

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